

**CLAIMS**

What is claimed is:

1. A system comprising:
  - 5 a first processor including a first processor data channel;
    - 10 a first hybrid switching module including a first hybrid switching module processor data channel, a first hybrid switching module main data channel, a first input/output link data channel, and a first switch, the first hybrid switching module processor data channel being coupled to the first processor data channel;
    - 15 a first main bus coupled to the first hybrid switching module main data channel;
  - 15 a second processor including a second processor data channel; and
    - 20 a second hybrid switching module including a second hybrid switching module processor data channel, a second input/output link data channel, and a second switch, the second hybrid switching module processor data channel being coupled to the second processor data channel, the second input/output link data channel being coupled to the first input/output link data channel.
- 25 2. The system of Claim 1 wherein said second hybrid switching module further comprises a second hybrid switching module main data channel, wherein said system further comprises:
  - 30 a second main bus coupled to the second hybrid switching module main data channel.
3. The system of Claim 1 further comprising:
  - 30 a third processor including a third processor data channel; and

5 a third hybrid switching module including a third hybrid switching module processor data channel, a third input/output link data channel, a fourth input/output link data channel, and a third switch, the third hybrid switching module processor data channel being coupled to the third processor data channel;

wherein said first hybrid switching module further comprises a fifth input/output link data channel;

10 wherein the third input/output link data channel is coupled to the fifth input/output link data channel;

wherein said second hybrid switching module further comprises a sixth input/output link data channel;

15 wherein the fourth input/output link data channel is coupled to the sixth input/output link data channel.

4. The system of Claim 3 wherein said second hybrid switching module further comprises a second hybrid switching module main data channel, wherein said system further comprises:

a second main bus coupled to the second hybrid switching module main data channel.

25 5. The system of Claim 4 wherein said third hybrid switching module further comprises a third hybrid switching module main data channel, wherein said system further comprises:

30 a third main bus coupled to the second hybrid switching module main data channel.

6. A apparatus comprising:

a hybrid switching module processor data channel;

a hybrid switching module main data channel;  
an input/output link data channel;  
a switch coupled to the hybrid switching module  
processor data channel; and

5 a bridge coupled to the hybrid switching module  
main data channel;

wherein the switch selectively couples to the  
bridge and selectively couples to the input/output link  
data channel, wherein the hybrid switching module  
10 processor data channel is thereby selectively coupled to  
the bridge and selectively coupled to the input/output  
link data channel.

7. The apparatus of Claim 6 further  
15 comprising a processor coupled to the hybrid switching  
module processor data channel.

8. The apparatus of Claim 6 further  
comprising a main bus coupled to the bridge.

20 9. The apparatus of Claim 6 further  
comprising another switch coupled to the input/output  
link data channel.

25 10. The apparatus of Claim 9 further  
comprising another bridge coupled to the other switch.

11. The apparatus of Claim 10 further  
comprising:

30 a first main bus coupled to the bridge; and  
a second main bus coupled to the other bridge.

12. The apparatus of Claim 9 further  
comprising:

a first processor coupled to the hybrid switching module processor data channel; and

5 a second processor coupled to another hybrid switching module processor data channel, the other switch being coupled to the other hybrid switching module processor data channel.

13. A system comprising:

10 a hybrid switching module processor data channel;

a hybrid switching module main data channel;

a hybrid switching module bus data channel;

an input/output link data channel; and

15 a hybrid switching module coupled to the hybrid switching module processor data channel and to the hybrid switching module main data channel;

20 wherein the hybrid switching module selectively couples to the a hybrid switching module bus data channel and selectively couples to the input/output link data channel, wherein the hybrid switching module processor data channel is thereby selectively coupled to the hybrid switching module bus data channel and selectively coupled to the input/output link data channel.

25 14. The apparatus of Claim 13 further comprising a processor coupled to the hybrid switching module processor data channel.

30 15. The apparatus of Claim 13 further comprising a main bus coupled to the hybrid switching module bus data channel.

16. The apparatus of Claim 13 further comprising another hybrid switching module coupled to the

input/output link data channel.

17. The apparatus of Claim 16 further comprising:

5 a first main bus coupled to the hybrid switching module; and

a second main bus coupled to the other hybrid switching module.

10 18. The apparatus of Claim 16 further comprising:

a first processor coupled to the hybrid switching module processor data channel; and

15 a second processor coupled to another hybrid switching module processor data channel, the other hybrid switching module being coupled to the other hybrid switching module processor data channel.

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